

Amendments to the Claims

1. (presently amended) A telephone echo reduction device for reducing echo
~~for an arrangement for transmitting audio signals, in particular uttered speech, having:~~
an echo reduction unit (4), ~~which is arranged~~ disposed between an
input channel (1) for receiving an input audio signal (A1) coming from a remote end
telephone, and an output channel (5) for outputting an output audio signal (A2), and
providing for suppressing an the variable suppression of any echo signal contained in
the output audio signal (A2) according to an echo suppression factor (s) at a control
input.

a speech activity detection unit (7) for detecting any speech signal
~~contained~~ in the input audio signal (A1) , wherein, said echo suppression factor (s) is
set near maximum if a speech signal is detected, and,

~~a control unit (6) for setting an echo suppression factor (s) of the echo~~
~~reduction unit (4) for echo suppression;~~

~~characterized in that the control unit (6) is so designed that the echo~~
~~suppression factor (s) is reduced gradually and continuously from a high echo~~
~~suppression value set while a speech signal is present in the input audio signal (A1) to~~
~~a low echo suppression value if the speech activity detection unit (7) detects that the~~
~~input audio signal (A1) does not contain any speech signal.~~

a control unit (6) connected to said input control of the echo reduction
unit (4), and when the speech activity detection unit (7) indicates no speech signal is
being detected, then providing for the echo suppression factor (s) to be gradually and
smoothly exponentially decayed from near maximum to near minimum over a time
profile;

wherein, any reverberation echoes that would otherwise occur are
limited.

2. Canceled.

3. (Presently amended) ~~A device as claimed in claim 2, characterized in that~~
~~reduction of~~ The device of Claim 1, wherein, the control unit (6) provides for the echo

suppression factor (s) ~~takes place in~~ to be exponentially decayed in accordance with the function

$$s[k] = \alpha \cdot s[k - 1] + (1 - \alpha) \cdot s_{\text{low}},$$

wherein $s[k]$ is the echo suppression value at the time k , α is a factor representing the exponential reduction behavior and s_{low} is ~~the~~ a minimum echo suppression value.

4. (Presently amended) ~~A device as claimed in claim 3, characterized in that~~
The device of Claim 3, wherein, the control unit (6) provides for the minimum
suppression value s_{low} ~~exhibits a value~~ is in the range ~~from of~~ of 0.1 to 1, preferably
~~approximately 0.5, and the factor α representing the exponential reduction exhibits a~~
~~value~~ is in the range ~~from of~~ of 0.5 to 0.99, preferably in the range ~~from 0.75 to 0.85.~~

5. (Presently amended) ~~A device as claimed in claim 1, characterized in that~~
The device of Claim 1, wherein, the control unit (6) is designed provides for time
delay of the reduction of the echo suppression factor (s) from the set high echo
~~suppression value to the low echo suppress~~
~~the range from 0.1 to 1 second, preferably~~

6. (Presently amended) ~~A device as~~
The device of Claim 1, further comprising:
a second speech activity det
of a speech signal ~~contained in the~~ an echo
reduction unit (4) and coming from a near ϵ